

Sexual Functioning and Dysfunction

In a previous chapter we learned about sexual anatomy and physiology, sometimes referred to euphemistically as “the plumbing.” In this chapter we discuss sexual functioning, or how the plumbing works during sexual activity. A key concept throughout this chapter is that there can be a great deal of variability in sexual functioning, both across individuals and across situations for any one individual. This variability makes it difficult to draw generalizations, because any statement about “typical” sexual functioning will not apply to some people (perhaps many people), yet that may not mean their sexuality is dysfunctional. This issue makes the notion of sexual dysfunction a controversial one. At what point does someone’s sexual functioning deviate enough from what is typical to justify the designation of having a sexual disorder? It may be helpful to think of sexual functioning as a continuum, with the label of sexual dysfunction or disorder reserved for one extreme end. Still, as we will see, there is some controversy over when a certain form of sexual functioning qualifies as a sexual dysfunction.

The controversy extends beyond the issue of when a sexual problem crosses the line into sexual dysfunction or disorder. The very model used to conceptualize sexual functioning entails some controversy. So, it is important to consider how it is that we have come to think of sexual functioning (and hence dysfunction). Most likely you had previously heard of Masters and Johnson, the famous pair of sexuality researchers. It was their pioneering work during the 1950s and beyond that opened the door to our understanding of how the human body responds during sexual activity. However, their work entailed making choices in how they approached the topic of sexual functioning, and those choices influenced how the results of their work were interpreted. Before examining in closer detail the components of sexual functioning, it is important to consider Masters’ and Johnson’s work, and the controversy that followed.

Masters and Johnson and The Sexual Response Cycle

William Masters realized in medical school that he wanted to study human sexual functioning. However, in the United States during the 1940s, the idea of studying sexual functioning firsthand was scandalous. There were strong social taboos against talking openly about sexuality, let alone observing human sexual functioning or studying it in the laboratory. Masters’ mentor advised that young William finish his medical training and build a reputation in a respectable area of research prior to launching into the deviant topic of sexual functioning. Masters took the advice and established himself as a well-respected gynecological surgeon, studying issues related to infertility.

While a faculty member at Washington University in St. Louis, Masters began studying sexual functioning more directly. It was now the mid-1950s, but there were still cultural taboos to overcome. For example, the university library contained only one book Masters could rely on for information about sexual anatomy, and he could not even check it out! Only full professors had access to the book, and Masters was only an associate professor at the time. Masters’ departmental chairperson checked out the book for his colleague, but it contained little information of use. So, Masters spent the next year working with individuals who had tremendous experience with sexual functioning: prostitutes.

Masters recognized that prostitutes were hardly typical in their experiences, and most likely in their own sexual functioning. He sought to study more typical individuals, particularly under laboratory conditions where he could obtain precise measurements. Before doing so, however, he recruited a colleague. One of the prostitutes Masters had studied, an attractive woman who had earned a doctorate in sociology,

suggested that if Masters sought to understand female sexuality, he needed to have a female colleague. Masters contacted the job placement center on campus and placed a posting for a research assistant. The posting did not specify the topic of study, and Masters interviewed those who responded.

In the end, Masters chose Virginia Johnson as his research collaborator. Masters made sure that the person he chose was intelligent, yet did not hold any graduate degrees. He was concerned that working with him might result in the collaborator being stripped of her professional credentials, and Masters did not want to be responsible for the professional ruin of someone he hired. Johnson had contemplated going to graduate school, but was faced with needing to work to support herself and her family after a divorce. Masters saw Johnson's status as a divorcee to be advantageous; she did not have a husband who would become suspicious or jealous as a result of her unusual research.

In 1957 Masters and Johnson began their work in the laboratory, studying sexual functioning among people without apparent sexual problems or complaints. They also studied people within a clinical context, learning about sexual dysfunction and attempting to help those with sexual problems. Masters and Johnson's laboratory work was unlike any research that had been performed before. The duo observed and filmed research participants engaged in sexual activity, either alone or with their primary partner.

For the first time, the researchers measured physiological responses, such as heart rate, breathing, muscle tension, and blood flow, during sexual activity. Masters and Johnson also used new measurement devices, including a clear plastic penis which contained a camera designed to observe blood flow within the vagina. Over several years, the researchers observed or measured sexual responses from nearly 700 different people. In most cases, the research participant was observed over numerous instances. So, Masters and Johnson estimate that they studied about 10,000 instances of sexual response, with nearly three-fourths of those being from female research participants.

Masters and Johnson were pioneers in sexuality research, and pioneers often pay a price for their role. In this case, their work was sometimes sabotaged, such as through missing pieces of equipment. Perhaps more importantly, there were personal attacks, often aimed at Masters' and Johnson's children. After publication of their first book, *Human Sexual Response*, in 1966, Masters and Johnson received a torrent of hate mail. Many people in the culture saw sexuality research as morally inappropriate, and those who performed such activities as deviant, or worse. Out of their controversial work, however, Masters and Johnson developed a body of information on what they termed the sexual response cycle.

The Sexual Response Cycle

It was in their 1966 book that Masters and Johnson presented their now famous sexual response cycle. Based on their years of research, they provided a model for typical sexual response, focusing on the physiological and behavioral aspects of what happens. Of course, when a person is experiencing sexual activity, he or she is unaware of all that is occurring within his or her body. The individual may have some awareness of his or her behavior, but the individual is probably most likely to focus on the subjective aspects of sexual response, such as feelings and pleasure. Interestingly, these subjective aspects of sexual response are not included in Masters' and Johnson's model. Still, the model is a useful place to start. The four phases in the sexual response cycle are labeled excitement, plateau, orgasm, and resolution.

Excitement. During the initial excitement phase, the individual's body is becoming increasingly physically aroused. Muscles tense, and heart rate and breathing increase, as does blood flow to the genitals. Many individuals experience a "sex flush" during this phase in which the face, neck, and chest become rosy and may exhibit what looks like a rash. Blood flow also increases to the breasts, making them somewhat larger. The nipples may become erect in both men and women (although a woman's nipples may appear flat during sexual excitement because the surrounding breast tissue has swollen). The increased blood flow, or *vasocongestion*, in the genitals causes the man's penis to become erect and the woman's vagina to begin to lubricate. As the pressure builds within the walls of the vagina, the clear portion of blood cells are forced out through tiny openings in the vaginal wall. This clear portion of blood cells is the fluid that makes up vaginal lubrication.

The vasocongestion also results in some enlargement of the clitoris and the labia, causing the labia to flatten and move apart, creating an opening to the vagina. When a woman is not sexually aroused, the walls of her vagina remain collapsed, similar to an uninflated balloon. During sexual excitement, however, the vagina itself lengthens and expands, becoming more of an open space (referred to as the *tenting effect*). In both men and women, this process may occur fairly quickly when young, but takes longer as we age. During youth, a male may experience an erection simply from a sexual fantasy or an erotic visual image. With age, greater stimulation is required to attain an erection. For both men and women, the degree of vasocongestion is also diminished somewhat later in life.

Plateau. During the plateau stage the process of physiological arousal that started in the excitement phase continues. There are further increases in heart rate, respiration, muscle tension, and vasocongestion, making it less likely that the individual would return to pre-excitement levels if suddenly distracted.

Due to increased blood flow, the testes increase in size by as much as 50%. This swelling may be experienced by the male as a sense of heaviness or mild discomfort in the testes. If sexual activity ceases at this point, it may take a while for the increased blood in the testes to evacuate. Although the heaviness may be uncomfortable, it is not harmful. Also, the scrotum becomes increasingly elevated, causing the testes to be held up tightly against the body. In the female, the clitoris retracts, decreasing in length by about 50%, until it is completely covered by the tissue of the clitoral hood.

Orgasm. As physiological arousal and subjective pleasure both increase, the individual may approach orgasm. At this point, blood pressure, respiratory rate, and the sex flush may all reach their most intense levels. There are also strong, involuntary muscle contractions experienced by both men and women (and may include muscle groups other than those associated with the genitals). The building of tension followed by release is the hallmark of orgasm. For women, muscle contractions occur in the vagina and the uterus, and these tend to become less forceful with age. Regardless of age, at orgasm, some men and women may experience involuntary vocal noises, such as grunts and groans, laughter, or even crying. For women, continued stimulation may result in subsequent orgasms with relatively little time in between (so called "multiple orgasms").

For men, involuntary muscle contractions involving various components of the internal structures of the genitals result in a two-stage process of orgasm. The first stage, *emission*, lasts only 2-3 seconds, and is when sperm and fluid are expelled from the vas deferens, seminal vesicles, and prostate gland into the urethra near the prostate gland. As the semen collects there, the man has the sensation that ejaculation is inevitable. That ejaculation is the second stage, and involves expulsion of the semen through the system

and out through the urethral opening at the head of the penis. Four or five orgasmic muscular contractions occur about a second apart, and these become less forceful with age. Simultaneously, muscles in the anus contract because they share a common nerve pathway with the set of muscles in the genitals. There is also a muscular contraction at the opening into the bladder, which prevents semen from being expelled into the bladder. Occasionally, certain medications or medical conditions can impair the functioning of this muscle, allowing semen into the bladder. In these cases of retrograde ejaculations, the individual experiences a “dry” orgasm, with the usual experience of muscle contractions but no ejaculation of semen.

Resolution. Almost immediately after orgasm, the body begins its fairly quick return to its pre-excitement state, a process referred to as resolution. During this stage the blood engorging the genitals is released into the bloodstream, muscles are generally relaxed, and blood pressure, heart rate, and skin tone return to what is typical for the individual. Resolution occurs more rapidly as we age, primarily because there was less vascongestion during sexual arousal. In about 30 to 40% of individuals, the resolution stage also includes noticeable but uncontrollable sweating.

Males typically experience a refractory period during and after resolution. During the refractory period it is physically impossible for the male to obtain an erection, regardless of the physical or mental stimulation provided. In fact, continued stimulation may be experienced as annoying or uncomfortable. This refractory period may last 15 minutes, or hours, or days, depending on several factors, including age and the frequency with which the individual had recently experienced orgasm and ejaculation. Older men and those who had more recently experienced the orgasms stage tend to have longer refractory periods. Women do not experience a refractory period per se, but some women report that further stimulation of the clitoris or vagina shortly after an orgasm is annoying or uncomfortable as well.

The Controversy

From the start, Masters’ and Johnson’s conclusions caused a stir. One reason was that they reported that male and female experience of sexual response was physiologically very similar. Notice in our brief description of each phase of the sexual response cycle, men and women were characterized as responding very similarly. The only differences had to do with ejaculation from males and not females, and women but not men having the ability to experience multiple orgasms. As we will see later in this chapter, males and females may be even less different in these two ways than once thought. So, physiologically at least, there appear to be few male-female differences in sexual response.

Another controversy arose from Master’s and Johnson’s finding that, physiologically, a woman’s orgasm produced by stimulation of the clitoris was the same as an orgasm produced by stimulation of the vagina. This may not seem like a revolutionary finding today, but up to that point in the twentieth century, Western thought on mental health and sexuality was dominated by Freudian psychoanalysis. Recall from Chapter 2 that the Phallic Stage of psychosexual development was believed to revolve around the theme of gender identification. During this stage children realize that men have penises and women do not, and the child begins to identify more strongly with the parent of the same gender.

Freud believed that young children commonly masturbate, girls doing so by stimulating the clitoris and boys doing so by stimulating the penis. If one views the clitoris as a “mini-phallus” or the female organ corresponding to the penis in males, then one could say that the phallus is the focus of young children, regardless of gender (hence the term “phallic stage”). Freud believed that girls needed to give up this

phallic focus if they were to mature and completely identify with the female role. In other words, girls need to shift from focusing on the clitoris for orgasm to focusing on the vagina for orgasm. “Clitoral orgasms” were said to be immature, and to continue experiencing them as an adult may be a sign of having gotten stuck developmentally.

How did Masters’ and Johnson’s findings contradict the Freudian view? They found that, physiologically, orgasms were the same, regardless of whether they were the result of clitoral stimulation, or vaginal stimulation, or any other kind of stimulation. They also found that a woman’s orgasms typically involved clitoral stimulation, even if neither she nor her partner were intentionally stimulating her clitoris. Due to the way the labia come together to form the clitoral hood, thrusting in and out of a woman’s vagina causes the clitoral hood to move back and forth on the clitoris, thereby providing clitoral stimulation.

Initial controversy surrounding Masters’ and Johnson’s work resulted in changes in the way men’s and women’s sexual responses were viewed. More recent controversy involves criticism over how Masters’ and Johnson’s model has so strongly influenced the Western views of sexual response, despite problematic issues in their methodology. Notice how Masters’ and Johnson’s model refers to *the* sexual response cycle. We put the emphasis on the word *the* here to point out how the implication of the model is that it describes the typical pattern of sexual response for humans as a species. However, for any research findings to apply to humans in general, we would need to be assured that a very wide range of different types of people were studied. Who were the people who participated in Masters’ and Johnson’s unusual research?

Especially at first, Masters and Johnson recruited research participants from their contacts associated with the university where they worked. So, students, colleagues, and university staff, or people known by these folks, were the primary research participants. As a result, there were predominantly young, Caucasian, and well-educated; nearly 80% were between the ages of 21 and 40, and more than 70% had at least some college education (30% of the total sample were graduate students or people who had post-graduate degrees). Also, because of what was being requested of them, research participants were hardly the typical person on the street. What type of person might be willing to have their sexual activity observed, filmed, and/or measured in a laboratory?

We see how Masters’ and Johnson’s research participants represent a fairly unique slice of the population of the United States at the time. Additionally, Masters and Johnson selected potential research participants in such a way that it may have almost been guaranteed that sexual responses would follow an assumed pattern. Only people who had a history of experiencing orgasm during sexual intercourse and masturbation were studied. Because prior research had shown that women were much less likely than men to masturbate, the male and female research participants were likely to have been much more similar than men and women were in the general population. Also, given what we know about volunteer bias, it is not surprising that Masters and Johnson (1966) noted that their research participants were very sexually enthusiastic; they shared a basic interest in sexual performance and ways to enhance it. All of these factors and others lead us to question how generalizable Masters’ and Johnson’s sexual response cycle model is to men and women as a whole. The model itself emphasizes the genitals as the site of sexual response and leads to a focus on individual body parts when determining whether there is a problem in sexual functioning.

Diagnosing Dysfunction

The diversity in sexual functioning may result from the fact that sexuality can be influenced by many things. As we discuss various problems in sexual functioning we will cover some of the primary explanations or potential causes for those problems. In trying to understand how and why sexual functioning can become problematic, it will be important to draw distinctions between sexual dysfunction that is lifelong versus acquired, and generalized versus situational.

Lifelong sexual dysfunction means that the problem has existed since the individual was first capable of sexual functioning; there has not been a time when that person was free of the problem. **Acquired sexual dysfunction** means that there was a previous point during which the individual did not experience the problem. **Generalized sexual dysfunction** refers to experiencing the problem across sexual situations; it does not matter where, when, or with whom the individual is being sexual, the problem persists. **Situational sexual dysfunction** refers to problems that occur only in particular settings or with certain partners. So, a sexual dysfunction can be secondary and either generalized or situational, but a primary sexual dysfunction, by definition, is generalized.

In examining sexual functioning and dysfunction in the remainder of the chapter, we will consider arousal and orgasm, both important phases of Masters' and Johnson's model. We also consider pain that some individuals experience during sexual activity. However, we start by considering sexual desire. These four topics, desire, arousal, orgasm, and pain, correspond to the sexual dysfunctions as categorized in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychological Association), typically referred to as the *DSM*.

The *DSM* provides criteria for determining whether a particular case involving sexual dysfunction qualifies as a specific disorder. Because the *DSM* is meant to be a guide for mental disorders, the specific diagnoses are meant to describe cases where emotional or psychological factors at least partially explain the cause of the dysfunction. Any particular case of sexual dysfunction that can be explained by biological factors (including substance abuse or side effects from medications) or some other emotional or psychological problem (such as depression) does not receive a specific diagnostic label.

Unfortunately, determining the cause(s) of sexual problems is often very difficult. Also, as we will see, the *DSM* diagnostic criteria are often rather subjective, being left up to a clinician's judgment. For each sexual disorder listed in the *DSM*, one of the criteria is that the sexual dysfunction causes the person distress, interferes with his or her relationships, or both. So, if an individual is experiencing what appears to us as sexual dysfunction, but he or she is not concerned, and it does not interfere in his or her relationships, there is no diagnosable sexual disorder. Depending on one's life circumstances, such may be the case in some instances of low sexual desire.